IN THE SPECIFICATION:

Please replace page 7, line 24-page 8, line 5 with the following amended paragraph:

A mould cavity 126 is formed between the faces of a fixed cavity insert 128 located in fixed dieblock 112 and a moving cavity insert 130 located in moving dieblock 114. Fixed cavity insert 128 has a cooling passage 132 (shown in broken lines) connected to fluid couplings 134 in dieblock 112 and moving cavity insert 130 has a cooling passage 136 (shown in broken lines) connected to fluid couplings 138 in dieblock 114. ~~Runner~~ A runner channel[[s]] 140a ~~are~~ is formed between die inserts 128 and 130 so as to connect[[ing]] to a runner channel 140b formed between dieblocks 112 and 114, runner channel[[s]] 140a being connected to cavity 126 by one or more gates 142. With the die set closed (as shown in Figures 2 and 4) a shot of melt is injected along runner channels 140b and 140a into mould cavity 126 to form product and runner castings. Moving platen 106, backplate 110, bolsters 116, dieblock 114 and die insert 130 are then withdrawn from the fixed portion of the die set while ejector assembly 118 is held stationary. Dieblock 114 therefore slides along pins 122 and 124 to effect the ejection of the product and associated runner castings formed in cavity 126 and runner channels 140a and 140b.

Please replace page 8, lines 10-22 with the following amended paragraph:

The hot sprue system of the first example will now be described with particular reference to the enlarged sectional elevation of Figure 3 and the

enlarged plan view of Figure 4. It comprises a cylindrical tubular sprue body insert 150 mounted in fixed backplate 108 and dieblock ~~122~~ 112 and an opposed mating cylindrical sprue tip insert 152 mounted in moving dieblock 114, the inserts 150 and 152 being coaxial and their common axis 154 being orthogonal to interface 115. Sprue body insert 150 has a central tapering sprue channel 156 that narrows in section from its outer end 156a to its inner end 156b. The inner ends of inserts 150 and 152 mate near parting-line 115 to define a curved transition channel 158 that subtends an angle of 90° and connects sprue channel 156 to runner channels 140a and 140b, the parting-line of transition channel 158 being indicated at 160. Both the transition channel 158 and runner channels 140a and 140b preferably narrow gradually toward gates 142.

Please replace page 8, line 24-page 9, line 5 with the following amended paragraph:

Sprue body insert 150 has a cylindrical exterior about which is wound an electrical heating element 162 that can be supplied with electrical power via a lead ~~164~~163. Body insert 150 has a mushroom-like head 164 that provides an outer recess 166, which forms a socket for the heated nozzle 168 (Figure 2) of diecasting machine 100, and an inner skirt 170 by which insert 150 is located in fixed dieblock 112. A pin 171 which extends radially from skirt 170 and locates in a groove 172 in fixed dieblock 112, and a ring shim 173 which spaces insert 150 from dieblock 112, ensure that the inner end of body insert 150 mates properly with the inner end of tip insert 152 along parting-line 160. A thermocouple

temperature sensor 174 is imbedded in body insert 150 and connected via lead 176 to suitable temperature measurement and control equipment (not shown). Heating element lead 164 and sensor lead 176 pass through a slot 178 formed in skirt 170 (see also Figure 5). Body insert 150 is held in place by a clamping ring 180 that is secured by bolts 182 to fixed backplate 108, the inner end 184 of insert 150 being a snug fit in dieblock 112 so that there is no leakage of melt from transition channel 158 into the space 186 in dieblock 112 that houses sprue insert 150.

Please replace page 9, lines 7-12 with the following amended paragraph:

With particular reference to Figure 5 (which does not show electrical heating element 162 or leads ~~164~~ 163 and 176), the inner end 184 of body insert 150 has a part conical socket ~~190~~192, in one side of which one half – indicated at 158a – of curved transition channel 158 (Figure 4) is formed. A convex-curved shoulder 19~~0~~2 is formed on each side of half channel 158a between it and the inner wall of socket 184.

Please replace page 9, lines 14-26 with the following amended paragraph:

With reference to Figures 3, 4 and 6, sprue tip insert 152 has a part conical plug 194 on its inner end that is shaped to fit snugly into socket 192 of body insert 150. One side of plug 194 is cut away to form a pair of concave-curved shoulders 196 on either side of curved groove 158b that forms half of transition channel 158. Shoulders 196 abut with the complementary shoulders ~~192~~ 190 on sprue body insert 150. A central baffled cooling passage 198 is formed in insert 152 that connects to cooling fluid passages 200 formed in moving dieblock 114. A

temperature sensor 202 is imbedded in insert 152 and its leads 204 are taken through dieblock 114 to a temperature controller (not shown) that regulates the flow of cooling fluid through passages 198 and ~~202~~200. Finally, sprue tip insert 152 is rotationally located within its socket in dieblock 114 by the use of a key 206 (Figure 43). [The temperature sensor leads and cooling ~~passages~~ passage 198 are not shown in Figure 6.]

Please replace page 10, lines 4-19 with the following amended paragraph:

The second example of a hot sprue system formed in accordance with the present invention is shown in Figure 7. As in the first example, the die set includes a fixed back plate 108, ~~thermal insulating plate 109,~~ fixed dieblock 112 and moving dieblock 114. In this example, however, two pairs of die inserts 250 and 252 are employed, fed by respective runner channels 254 and 256. The sprue body insert 258 in this example defines a central tapering sprue channel 260, as before. It is formed, located and clamped as in the first example, except that its inner end is bifurcated to form a pair of opposed curved half transition channels 262 and 264 that connect with respective runner channels 254 and 256. Similarly, the inner end of sprue tip insert 266 is bifurcated to form two opposed curved half transition channels 268 and 270 that connect with runners 254 and 256, mating with the corresponding half transition channels 262 and 264 of sprue body insert 258. As before, body insert 258 has a heating element 272 and tip insert 266 has a cooling passage 274. However, in this example, two ejector pins 276 and 278 are used to

ensure that the casting formed in each transition channel is positively ejected when the dies part after each shot.